

CLAIMS

1. A marking system for a web advancing along a path, comprising:
 - a monitoring station at which the web advancing along said path is observed;
 - mark signal means arranged to produce an appropriate mark signal on detection of a location to be marked and the nature of the required mark;
 - a tab applicator disposed downstream of the monitoring station and arranged to apply an adhesive tab to the web at the detected location, the tab inserter including an on-line printer for printing indicia on to each tab before the tab is applied to the web; and
 - control means receiving the mark signal from the mark signal means and driving the on-line printer and the tab applicator in a timed relationship to the advancement of the web whereby each tab is positioned at the detected location and carries appropriate indicia for that location.
2. A marking system as claimed in claim 1, wherein the tab applicator includes a labelling head adapted to apply tabs each in the form of a self-adhesive label to the web.
3. A marking system as claimed in claim 2, wherein the labelling head is provided with a vacuum foot which collects a printed tab and holds the tab until the detected location to be marked is therebelow.
4. A marking system as claimed in claim 2 or claim 3, wherein the labelling head includes at least one air-jet nozzle air issuing from which serves to thrust a tab discharged from the labelling head on to the web.
5. A marking system as claimed in claim 4, wherein an air controller is provided to cause air to issue from the at least one air jet nozzle only when a tab is released from the vacuum foot, to be applied to the web.
6. A marking system as claimed in any of the preceding claims, wherein the on-line printer comprises one of a dot-matrix print-head, a thermal print head or a thermal transfer print head.

7. A marking system as claimed in any of the preceding claims, wherein the tab applicator is arranged to advance the next tab to be applied initially at a low speed while printing takes place, the tab applicator then applying the printed tab at a relatively high speed to the advancing web, at the detected location.

5 8. A marking system as claimed in claim 7, wherein each tab is applied to the advancing web in a direction generally transverse to the direction of advancement of the web.

9. A marking system as claimed in any of the preceding claims, wherein each tab is applied to the web so that a part of the applied tab overhangs an
10 edge of the web.

10. A marking system as claimed in any of the preceding claims, wherein monitoring means is provided at the monitoring station, said monitoring means comprising at least one of a splice detector and a web fault detector.

11. A marking system as claimed in claim 10, wherein the web fault detector
15 includes a video camera arranged to scan the web advancing along the path and a camera output is analysed to determine the presence of one or more web defects.

12. A marking system as claimed in any of the preceding claims, wherein the control means includes a remote operation controller permitting the manual
20 production of a mark signal on visual detection of a location to be marked.

13. A method of marking a web advancing along a path, which method comprises:

- monitoring the web as it passes through a monitoring station provided on said path and producing a mark signal on detection of a location on
25 the web to be marked, the mark signal including information about the nature of the required mark;
- feeding the mark signal to control means which provides a drive signal for an on-line printer and a tab applicator provided downstream of the monitoring station, the drive signal being provided in a timed
30 relationship to the advancement of the web; and
- using the drive signal to print an adhesive tab with the on-line printer so that the tab carries appropriate indicia for the required mark and

thereafter applying the tab to the web, whereby each applied tab is positioned at the noted location and carries appropriate indicia for that location.

14. A method as claimed in claim 13, wherein the speed of advancement of the web is monitored and a speed signal produced dependant thereon, and said speed signal is supplied to the control means so that the tab may be applied to the web at the required location.

15. A method as claimed in claim 13 or claim 14, wherein the indicia printed on a tab comprise a group of alphanumeric characters coded having regard to the noted defect to be marked.

16. A method as claimed in claim 15, wherein a group of three alphanumeric characters is printed on each tab.

17. A method as claimed in any of claims 13 to 16, wherein each tab is applied in a direction transverse to the direction of advancement of the web.

18. A method as claimed in claim 17, wherein each tab is applied to the advancing web so that a part of the tab overhangs an edge of the web.